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EXAMINER

TORRES VELAZQUEZ, NORCA LIZ

ART UNIT PAPER NUMBER

1771

DATE MAILED: 07/30/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/760,110

Applicant(s)

GROTEN ET AL.

Examiner

Norca L. Torres-Velazquez

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 05 May 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) 21-25 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

### DETAILED ACTION

Applicant's arguments with respect to claims 1-20 have been considered but are moot in view of the new ground(s) of rejection.

#### *Claim Rejections - 35 USC § 102/103*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(g)(1) during the course of an interference conducted under section 135 or section 291, another inventor involved therein establishes, to the extent permitted in section 104, that before such person's invention thereof the invention was made by such other inventor and not abandoned, suppressed, or concealed, or (2) before such person's invention thereof, the invention was made in this country by another inventor who had not abandoned, suppressed, or concealed it. In determining priority of invention under this subsection, there shall be considered not only the respective dates of conception and reduction to practice of the invention, but also the reasonable diligence of one who was first to conceive and last to reduce to practice, from a time prior to conception by the other.

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-20 are rejected under 35 U.S.C. 102(g) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over GROITZCH et al. (US 6,448,462 B2).

GROITZCH et al. discloses a medical bandaging material made of a microfilament nonwoven fabric with a mass per unit area of 30 to 150 g/m<sup>2</sup>. The nonwoven fabric is made of continuous multicomponent filaments, melt spun, stretched, and directly laid down to form a nonwoven fabric, having a titer if 1.5 to 5 dtex, and the continuous multicomponent filaments, after optional prebonding, being split, at least to the extent of 80%, into continuous

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microfilaments having a titer of 0.01 to 1.0 dtex and bonded (Abstract, claims 1 and 8). With regards to the filaments having an isotropic fiber distribution, GROITZSCH et al. teaches this limitation as a result of the method used to lay down the continuous filaments to form the fabric (refer to Column 5, lines 35-39). The reference further teaches the use of continuous multicomponent filaments with a titer of 2 to 3 dtex and that the multicomponent filaments are prebonded before being split. (Refer to Claims 2 and 3) Further, the reference teaches the use of continuous bicomponent filaments made of two incompatible polymers and a cross-section with an orange-like multisegment structure or a "side-by-side" structure. (Claims 4 and 5). The reference further teaches the use of additives such as dyestuffs, permanently acting antistatic, fungicides, bactericides, softeners, stabilizers, wetting and parting agents, optical brightening agents, among others. (Column 2, lines 61-67)

Applicant's ranges for the limitation of weight of the nonwoven are broad and encompass typical values that are found in the prior art. Further each of the elements are recognized as result effective variables in this field of endeavor and it has been held that discovering optimum values would have been or result effective variables involves only routine experimentation. The GROITZSCH et al. reference is directed to a medical bandaging that uses preferably a nonwoven fabric with a mass per unit are of 40 to 120 g/m<sup>2</sup>. (Column 1, lines 54-56) However, it is known in the field of cleaning cloths to use cloths with a surface weight from 50 to 500 g/m<sup>2</sup>, depending on the particular use. For example, for manual work lighter types are preferred, while cloths use as components of cleaning machines and equipment can have a weight up to 500 g/m<sup>2</sup>, in order to increase the pressure during the cleaning process. (As disclosed by ZILG et al., column 4, lines 44-49) Further, with regards to texturing processes such as napping, emerizing, brushing

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and spot calendering, as claimed in claims 10, 16 and 18; the texturing of nonwovens to form cleaning cloths is well known in the art. (Refer to the ZILG et al. reference, column 4)

4. Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over GILLESPIE et al. (US 5,783,503) in view of ZILG et al. (US 5,725,927) and GROITZSCH et al. (US 6,448,462 B2).

GILLESPIE et al. teaches multicomponent thermoplastic continuous filaments that can be produced by melt spinning. (Abstract) The reference teaches that fine filaments, including sub-denier and microfilaments of one or more components, can be produced if the filament components are small in diameter. Sub-denier filaments typically have deniers in the range of 1 denier per filaments or less. Microfilaments typically have deniers in the range of from about 0.1 to 0.3 denier per filament [*equivalent to 0.111 to 0.333 dtex per filament*]. (Column 6, lines 24-29) Further, the reference teaches that their invention provides multicomponent thermoplastic continuous filaments that can be split into smaller filaments upon exiting a spinneret in free fall from the spinneret. (Column 2, lines 62-65) GILLESPIE et al. further teaches that the products that can be produced with the filaments of their invention include continuous filament nonwoven webs. The nonwoven webs of their invention have increased tensile, softness, barrier properties, and water transport properties compared to typical spun-laid and spun-bonded webs that have a single component. (Column 3, lines 17-34)

GILLESPIE et al. teaches the use of multicomponent filaments that are bicomponent filaments in a "segmented pie" configuration having two different thermoplastic polymeric components. (Refer to Fig. 1, Column 4, lines 18-22) Further, the reference discloses that

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suitable polymers for practice of the invention include polyolefins, including polyamides and polyesters. (Column 5, lines 4-20). The reference also discloses the use of bicomponent filaments in a side-by-side configuration. (Column 5, lines 66-67). The reference also teaches that nonwoven fabrics made with the splittable filaments of their invention should be particularly useful as components for disposable absorbent articles and wipes; medical barrier fabrics, including garments and wraps; and filtration media. (Column 6, lines 60-65)

However, the reference does not disclose that the basis weight of the microfilament nonwoven is from  $30 \text{ g/m}^2$  to  $500 \text{ g/m}^2$ .

ZILG et al. discloses a reusable cleaning cloth for damp and dry cleaning of surfaces. The cloth is made of a textile base layer of non-woven fibers and, on the surface that provides the cleaning action, a plurality of filament loops, which project out of this surface. (Abstract) The reference teaches that the filaments loops are obtained by needle-tufting the textile base layer, further that they can consist of the same or different textile material, such as natural, regenerated and synthetic fibers, which can be anti-static, treated to be anti-static or treated with substances which promote cleansing. (Column 1, lines 5-52) It is noted that the surface produced by the ZILG et al. cleaning cloth is similar to the surface produced by napping, which produces a downy surface in the cloth when part of the fiber is raised from the basic structure.

Further, the ZILG et al. reference teaches that the fiber thickness can be adapted to the particular intended use; for cleaning rougher surfaces, titers of 100 dtex are preferred choice; for polished surfaces, fiber or filament thickness down to 1 dtex can be used. Depending on the particular use, the surface weight of the cloth can vary from 50 to  $500 \text{ g/m}^2$ . For example, for manual work lighter types will be preferred, while cloths used as components of cleaning

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machines and equipment can have a weight up to  $500 \text{ g/m}^2$ , in order to increase the pressure during the cleaning process. (Column 4, lines 40-49)

However, the references do not suggest or imply that the multicomponent filaments are pre-bonded before splitting them.

GROITZSCH et al. discloses a nonwoven made of continuous multicomponent filaments, melt spun, stretched, and directly laid down to form a nonwoven fabric, having a titer if 1.5 to 5 dtex, and the continuous multicomponent filaments, after optional prebonding, being split, at least to the extent of 80%, into continuous microfilaments having a titer of 0.01 to 1.0 dtex and bonded (Abstract, claims 1 and 8). With regards to the filaments having an isotropic fiber distribution, GROITZSCH et al. teaches this limitation as a result of the method used to lay down the continuous filaments to form the fabric (refer to Column 5, lines 35-39). The reference further teaches the use of continuous multicomponent filaments with a titer of 2 to 3 dtex and that the multicomponent filaments are prebonded before being split. (Refer to Claims 2 and 3)

Since both GILLESPIE et al., ZILG et al. and GROITZSCH et al. are directed to nonwoven fabrics, the purpose disclosed by ZILG et al. and GROITZSCH et al. would have been recognized in the pertinent art of GILLESPIE et al.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the cloth to have a basis weight between  $50$  to  $500 \text{ g/m}^2$  with the motivation of using a higher weight in order have a cleaning cloth that can be used in applications such as cleaning machines and equipment that will stand increased pressure during the cleaning process as disclosed by ZILG et al. (Column 4, lines 44-49).

### ***Double Patenting***

5. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

6. Claims 1-20 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-5 of U.S. Patent No. 6,448,462 in view of ZILG et al. (US 5,725,927).

GROITZCH et al. discloses a medical bandaging material made of a microfilament nonwoven fabric with a mass per unit area of 30 to 150 g/m<sup>2</sup>. The nonwoven fabric is made of continuous multicomponent filaments, melt spun, stretched, and directly laid down to form a nonwoven fabric, having a titer if 1.5 to 5 dtex, and the continuous multicomponent filaments, after optional prebonding, being split, at least to the extent of 80%, into continuous microfilaments having a titer of 0.01 to 1.0 dtex and bonded (Abstract, claims 1 and 8). With regards to the filaments having an isotropic fiber distribution, GROITZSCH et al. teaches this limitation as a result of the method used to lay down the continuous filaments to form the fabric (refer to Column 5, lines 35-39). The reference further teaches the use of continuous multicomponent filaments with a titer of 2 to 3 dtex and that the multicomponent filaments are prebonded before being split. (Refer to Claims 2 and 3) Further, the reference teaches the use of

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continuous bicomponent filaments made of two incompatible polymers and a cross-section with an orange-like multisegment structure or a "side-by-side" structure. (Claims 4 and 5). The reference further teaches the use of additives such as dyestuffs, permanently acting antistatics, fungicides, bactericides, softeners, stabilizers, wetting and parting agents, optical brightening agents, among others. (Column 2, lines 61-67)

The GROITZSCH et al. reference is directed to a medical bandaging that uses preferably a nonwoven fabric with a mass per unit are of 40 to 120 g/m<sup>2</sup>. (Column 1, lines 54-56) The reference fails to teach nonwoven webs with a weight that ranges up to 500 g/m<sup>2</sup>. However, it is known in the field of cleaning cloths to use cloths with a surface weight from 50 to 500 g/m<sup>2</sup>, depending on the particular use. ZILG et al. discloses cleaning cloths, and teaches that for manual work lighter types are preferred, while cloths use as components of cleaning machines and equipment can have a weight up to 500 g/m<sup>2</sup>, in order to increase the pressure during the cleaning process. (Column 4, lines 44-49) Further, with regards to texturing processes such as napping, emerizing, brushing and spot-calendering, as claimed in claims 10, 16 and 18; the texturing of nonwovens to form cleaning cloths is well known in the art. (Refer to the ZILG et al. reference, column 4)

Since both GROITZSCH et al. and ZILG et al. are directed to nonwoven materials, the purpose discloses by ZILG et al. would have been recognized in the pertinent art of GROITZSCH et al. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the weight of the nonwoven material to have a basis weight up to 500 g/m<sup>2</sup> with the motivation of using a higher weight in order have a cleaning

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cloth that will stand increased pressure during the cleaning process as disclosed by ZILG et al. (Column 4, lines 44-49).

*Conclusion*

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

GROTEN et al. (US 5,970,583) – discloses a nonwoven lap of very fine continuous filaments, obtained by means of a controlled direct spinning process, with a weight between 5 g/m<sup>2</sup> and 600 g/m<sup>2</sup>, and formed, after napping, of composite filaments separable in the direction of their length, characterized in that said composite filaments have a filament number between 0.3 dtex and 10 dtex and are formed, each, of at least three elementary filaments of at least two different materials. (Abstract)

GROTEN et al. (US 5,899,785)

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

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however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Norca L. Torres-Velazquez whose telephone number is 703-306-5714. The examiner can normally be reached on Monday-Thursday 8:00-4:00 pm..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on 703-308-2414. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

NLT  
July 18, 2003

  
ELIZABETH M. COLE  
PRIMARY EXAMINER